Homeowner's Tip Guide

Compliments of

OLD REPUBLIC HOME PROTECTION

We're People Helping People

OLD REPUBLIC Home Protection

When you buy your car, you take it in for regular maintenance, oil changes and tune-ups. Unfortunately, homes do not have a "service station" that will take care of regular maintenance and upkeep. In most cases, your home did not come with an "Owner's Manual" to tell you what needs to be done, when it needs to be done, and how to do it.

Old Republic Home Protection takes pride in being "People Helping People". We have compiled an "Owner's Manual" designed to help you with regular home-related topics such as:

- How to develop an annual maintenance schedule for many of your home's systems and appliances.
- Maintenance information which will help you avoid bigger problems by taking care of them when they are small.
- How to "trouble shoot" malfunctions on your own, so you can resolve those malfunctions without the need for a service person or the expense of a home protection plan service fee.

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Maintenance Schedule

MONTHLY

Safety

- Make sure your fire extinguishers are fully charged
- Test your:
  - Garage door opener(s)
  - GFCI receptacles and breakers
  - Smoke detectors to ensure you have fresh batteries
  - Carbon monoxide detectors to ensure you have fresh batteries

Plumbing

- Check plumbing fixtures and "water-using" appliances for leaks
- Grind a cut-up lemon and then 2-3 cups of ice in the garbage disposal (the lemon keeps your disposal fresh and odor-free while the ice helps keep the blades sharp)
- Clean pop-up sink and tub strainers
- Pour a mixture of baking soda, white vinegar, and boiling water down drains to keep them running freely
- Pour water down seldom-used drains
- Drain a few gallons of water from the valve at the base of the water heater to remove sediment and extend the life of the water heater
- Clean faucet aerators and shower heads with a soft brush to remove mineral build-up

Appliances

- Clean refrigerator drain pan
- Clean dishwasher food filters and check that openings in spray arms are clear; check dishwasher for leaks
- Clean kitchen exhaust fan filters

Heating and Cooling

- Check furnace or cooling filter, replace if necessary

ANNUALLY OR SEMI-ANNUALLY • *SPRING*

Plumbing

- Inspect septic field and tank area for flooding or odor
- Have septic tank inspected and pumped as needed
- Inspect water heater temperature pressure relief valve for signs of leaks or discharge
- Flush the water heater

Heating and Cooling

- Clean around air conditioner compressor
- Have heat pump or air conditioning system cleaned and tuned-up before cooling season begins
- Have evaporator coil inspected and cleaned, if necessary
- Have chimney(s) cleaned and inspected

Electrical

- Replace the batteries in smoke detectors twice a year. An easy way to remember this is to change the batteries when the time changes. It's also a good idea to vacuum out the smoke detectors when you change the batteries so they stay clean and operate at peak efficiency

Exterior

- Clean and inspect gutters and downspouts after trees have seeded; repair as needed
- Hose off house exterior; scrub off any mildew
- Clean gaps between deck boards, under decks and porches and treat for fungus and mildew as needed
- Check paint, siding, or masonry for deterioration. Deteriorated paint can lead to widespread rot. One topcoat of paint should last four or five years, but two coats can last twice that long
- Inspect weather stripping around windows and doors; replace as needed
- Inspect window screens; repair as needed
- Clean out basement window wells
- Clean sliding door tracks and lubricate with white lithium compound
- Inspect basement/crawl space and attic for signs of pests such as termites, carpenter ants, wasps, and hornets

ANNUALLY OR SEMI-ANNUALLY • *SUMMER*

Plumbing

- Check the flapper on your toilets at least once a year. If it is an older one, you may want to replace it since it could allow water through, causing your toilet to "run" continuously

Heating and Cooling

- Examine windows; re-glaze as needed
- Ensure all east, west and south facing windows are shaded to decrease cooling costs

Garage Door

- Clean and lubricate garage door tracks, rollers, springs and hinges; tighten screws
- Inspect paint and sealant on exterior and garage door, particularly along the bottom edge

Interior

- Inspect walls and ceiling for cracks, sags, bowing or leaning
- Clean and seal tile grout

Maintenance Schedule

ANNUALLY OR SEMI-ANNUALLY • *FALL*

Plumbing

- Close and drain hose bibs, drain and store hoses
- Check septic field and tank area for flooding or odor
- Inspect water heater temperature pressure relief valve for signs of leaks or discharge

Heating and Cooling

- Clean around air conditioner condenser, then cover to protect during the fall/winter months
- Have fireplace and flues inspected and cleaned, repair as needed
- Schedule heating system tune-up and cleaning
- Clean ceiling fan blades

Exterior

- Check paint, siding, or masonry for deterioration.
- Trim foundation plantings to leave a foot of clear space between plantings and house
- Rake debris away from side of house and other structures
- Clean gutters and downspouts; repair as needed
- Check roof for leaks
- Check exterior house siding
- Trim any tree branches near or touching roof or gutters
- Check all exterior caulk; repair as needed
- Insulate for winter – On a windy day, feel around the edges of doors, windows and fireplaces for any air leaks. Look for dust piles as clues to leaks. Caulk and repair weather stripping as needed
- Clear storm window weep holes of debris
- Clean under decks and porches as well as the space between the deck boards
- Clean out basement window wells

ANNUALLY OR SEMI-ANNUALLY • *WINTER*

Plumbing

- Clean and seal grout
- Exercise (turn off and on) plumbing shutoff valves and inspect for leaks
- Inspect water heater temperature pressure relief valve for signs of leaks or discharge

Electrical

- Ensure your supply of flashlights has fresh batteries in case of a winter storm power outage

Exterior

- Inspect roof after large winter storms
- Inspect gutters and downspouts for leaks during a rainstorm
- Keep gutters free from debris and ice
- On a windy day, feel around the edges of doors, windows and fireplaces for any air leaks. Look for dust piles as clues to leaks. Caulk and repair weather stripping as needed

Emergencies

OVERVIEW

Despite your best precautions, emergencies can still occur. You can prevent an emergency from becoming a catastrophe by learning what to do. This section discusses how to react to:

- Plumbing emergencies
- Electrical emergencies
- Gas leaks
- A fire

Read this section and discuss it with all members of your household, reviewing annually, so that everyone is prepared for an emergency. Make copies of these pages for your baby-sitters so they will be prepared if an emergency strikes while you are away.

The first step during an electrical problem, water leak or gas leak is to shut off the flow of electricity, water or gas to your home. Every member of your household should know how to find these shutoff valves and switches.

You should keep a basic emergency kit that includes:

- A battery powered transistor radio
- A flashlight
- Extra batteries
- Candles and matches
- A first-aid kit
- A first-aid manual

These supplies will be welcomed if a natural disaster occurs. In addition, the first-aid kit and first-aid manual are good to have on hand for household use.

PLUMBING EMERGENCIES

Main Water Shutoff Valve

Main water shutoff valves are frequently located near water meters. Your water meter is likely outside near the street. Main water shutoff valves can also be located inside your home beneath a floor access panel or in a basement. Floor access panels are commonly found in closet floors. Look for a large valve in the middle of a pipe.

ELECTRICAL EMERGENCIES

Electrical emergencies such as an appliance malfunction, a power failure in your home or a neighborhood power outage can occur at any time.

You should know how to turn off the electrical power to your home and turn off and reset individual circuit breakers.

Main Disconnect

The main electrical disconnect should be located in or near the circuit panel box. The circuit panel box is usually in the garage, utility room, or utility closet .

Turn off the electrical power to your house by shutting off the main disconnect. The main disconnect is one or more main fuses or circuit breakers located on the circuit panel.

If the circuit panel is located in a laundry room or some other place where there could be water on the floor, use rubber gloves when shutting off the main disconnect. Keep a pair of rubber gloves near the circuit panel at all times for this purpose.

Be sure everyone in your household knows where the circuit breaker panel is located and can shut off the power.

Power Outage

If the power goes out suddenly in your home, determine whether the outage affects just your home or the entire neighborhood. If it is a neighborhood outage, notify your electric utility company.

If the electrical outage affects your home only, check for and reset tripped circuit breakers. If a breaker immediately trips again, call a professional electrician to test your electrical system.

Turn off or disconnect all motor-driven and electronic appliances to avoid possible damage from either inadequate power or a sudden electrical surge when power is restored. The furnace blower motor can be turned off by turning off the circuit breaker for the furnace.

Motors for dishwashers, clothes washers, clothes dryers, garbage disposals, range fans, sump pumps, refrigerators and other appliances can be disconnected by turning off or unplugging the appliance. Computers, televisions, video recorders, stereos and other electronic equipment should also be turned off. Turn on a radio and a lamp to alert you when service is restored.

After power has been restored, it should be safe to turn on all appliances. You can retard food spoilage by not opening refrigerators or freezers during the outage unless absolutely necessary. Food in a tightly packed freezer will stay frozen for up to 48 hours if the door has been kept closed. Food in a partially filled freezer may keep for 24 hours. If you are in doubt about the safety of frozen food after a power outage, throw it out.

Sparking Appliance

Do not touch a smoking or sparking appliance. Instead, cut off power to the appliance by unplugging the appliance, turning off the wall switch controlling the appliance or turning off the circuit breaker for the appliance. Allow the appliance to cool, then take it to a repair shop or call a professional service representative to repair the appliance.

If the appliance catches fire, get everyone out of the house, meet at your designated area and call the fire department from a neighbor's home.

Do not use water on an electrical fire, it can be fatal. If you discover an electrical fire early, use a multipurpose fire extinguisher on the flames.

If an appliance's electrical plug smokes or sparks, unplug the appliance by pulling its cord. Do not touch the plug itself. After the plug cools, inspect the plug and cord for damage. If they are damaged, replace the plug and cord or have them replaced by a professional service representative. Reset any tripped circuit breakers.

If the plug and cord appear to be OK and there are no tripped circuit breakers, the electrical outlet may be at fault. Test the outlet by plugging another appliance you know works properly into the receptacle. If that plug sparks too, replace the outlet or have it replaced by a professional electrician. If the new appliance does not cause sparks, then the original appliance is probably faulty and should be repaired or replaced.

GAS LEAKS

Your home may be serviced with natural or bottled gas. Gas is a safe, clean, economical energy source for appliances such as furnaces, boilers, water heaters, dryers, cooktops, fireplaces and barbecues. Although gas appliances are wonderful conveniences, gas must be treated with respect.

If you smell gas inside or outside your home, hear gas escaping from a broken line or see a broken gas line, you should:

- Get everyone out of and away from your home immediately
- Call your local gas company or your fire department from a neighbor's house
- Do not light a match, turn a light on or off, use a telephone (portable, cellular or regular) or operate any electrical switch or electronic device – flames or electric sparks can ignite the leaking gas
- Leave as many windows and doors open as

possible – the gas will rise and dissipate harmlessly outside

If the gas leak is inside your home, you can turn off your gas supply at the gas shutoff valve after everyone is out of the house. If you prefer, you can have your utility company turn off the gas.

The gas shutoff valve should be located on the pipe leading into the gas meter. Turn the valve a quarter-turn in either direction with an adjustable-end or "crescent" wrench. The gas is off when the valve is perpendicular to the pipe.

If the gas leak is outside your home, keep away from the leak area and away from your house. Do not attempt to shut off the gas supply. Your utility company will turn off the gas.

Once your gas is off, wait for the local gas company to restore your service.

FIRE PRECAUTIONS

Precautions and plans made today can prevent a fire-related tragedy tomorrow.

Smoke detectors are your first line of defense if a fire breaks out at night. Test your detectors on the first day of each month. Replace the batteries in the spring and fall when you change your clocks.

"Plan of Escape"

The first step during a fire is to get everyone out of the house. Planning your escape routes now can prevent needless loss of life during a fire.

1. With your family, map out escape routes from each room in your home. Pay particular attention to escape routes from bedrooms.
2. Agree on a central area outside your house to meet after evacuation so that everyone can be accounted for. This may be a neighbor's front door or a neighborhood landmark. The meeting place should be a place that children or injured people can reach without undue difficulty and yet still be safe from danger.
3. Have safety ladders near windows when ladders are necessary.
4. Keep stairs, doorways and hallways free from obstructions. In dense smoke, it may be difficult to see items blocking an escape route.

In the Event of a Small "Contained" Fire

If you discover a small fire that is still contained to its source, you can do the following:

- Cooking pan fire
  - Cover a small oil or grease fire in a cooking pan with a lid to smother the flames and remove the pan from heat.
  - Do not use water on an oil or grease fire. Water will spread the flames.
  - Turn off the kitchen exhaust fan. The fan can suck fire through the fan and ignite the outside of your home.
- Oven fire
  - Turn off the oven and allow the fire to burn itself out.
  - Do not open the oven door - fresh air will feed the fire and cause it to continue to burn.
- Electrical fire
  - If you discover an electrical fire early, use a multipurpose fire extinguisher.
  - Do not use water on an electrical fire. Water and electricity can be fatal.

Fire Extinguisher

Cooking is a leading cause of fire. If a fire breaks out in the kitchen, you will want an extinguisher close at hand. If there is a fire in another part of the home, you will know that an extinguisher can be found in the kitchen.

Read the operating instructions on the side of the extinguisher now so that you will know how to use it if needed. Finally, have the extinguisher serviced at the time recommended by the manufacturer. The manufacturer's service recommendations should be printed on the side of your fire extinguisher.

ROOF MAINTENANCE

It's easy to ignore your roof unless it begins to leak, demanding immediate attention. If you inspect your roof periodically, you can correct minor problems before they cause major damage.

Do not go up on your roof unless you:

- Feel comfortable working from heights
- Know how to safely use an extension ladder
- Have the necessary tools and equipment

If you have a tile or slate roof, do not go on your roof for any reason. These types of roof shingles can be easily broken from your body weight.

Many roofing materials come with manufacturer's warranties. However, in order to make a claim on a warranty, you may need to know:

- The manufacturer's name
- The place purchased
- The installer's name

ROOF INSPECTION

You should inspect your roof:

- Each fall before the winter weather begins
- After heavy wind or snow storms – to inspect for damage
- In the spring to look for winter damage

If you discover any problems, call a roofing professional.

Inspecting from the Inside:

1. Begin your roof inspection in the attic. Examine the main roof ridge, rafters and sheathing for moisture. Look for:
   a. Water stains
   b. Dark-colored areas of wet wood
   c. Soft spots that may indicate dry rot
2. Use a strong flashlight to inspect visually, then use a knife or thin screwdriver to probe for dry rot.
3. Mark any problem areas with chalk so you can find the areas later.
4. If it is necessary to remove fiberglass insulation to examine the sheathing wear loose clothing, gloves, goggles and a respirator for protection.
5. Turn off the lights and look for light coming through the roof. This is a sign of holes, cracks or other problems. Small shafts of light coming in at an angle indicate cracks that may swell shut when shingles are wet.
6. If you see any holes above you, drive nails or poke wire through the holes so they will be visible from the roof's surface.

Inspecting from the Outside (all roof types)

1. Inspect the flashing in the following areas:
   a. Roof valleys
   b. Roof and plumbing vents
   c. Around chimneys
   d. Along eaves
   e. Anywhere water can seep through open joints into the roof sheathing
2 Look for any flashing that has buckled or pulled away from the joints it is supposed to protect.
3. Look for holes and rust spots along the flashing surface.
   a. Small holes and rust patches can be patched or sealed
   b. Replace the flashing if you find large holes or extensive corrosion
4. Examine the flashing seams for dried or cracked roofing cement. Re-seal as necessary.
5. Look for loose nails and exposed nail heads. They should be re-nailed and covered with caulk or roofing cement.
6. Check gutters for any loose spikes or support straps and repair as necessary.
7. Gutters should slope gently towards the downspouts. Reset gutters that sag or slope improperly.
8. Inspect gutter seams, corner joints and downspout joints for proper fit. These joints should be repaired or sealed with caulk if they allow water to leak.
9. Inspect downspouts. Check for:
   a. Disconnected downspouts
   b. Corrosion
   c. Clogged sections
   d. Improper connections
   e. Loose straps
   f. Missing sections
10. Make sure the downspouts direct water away from your home.

Inspecting from the Outside (sloped or pitched roofs)

1. Step away from your home until you are able to see all exposed sections of your roof.
2. Use binoculars to visually inspect all portions of your roof. Binoculars allow you to get a close-up view of your roof without climbing up and moving around on a sloped surface.
3. Check the roof structure first by looking at the lines of the ridge and rafters.
   a. The ridge line should be perfectly horizontal
   b. Inspect the line of the rafters by looking along the plane of each roof section. The plane should be straight
   c. If either the ridge line or the plane of a roof section sags, call a professional contractor. You may have a structural problem
4. Inspect the roof's surface. Look for the signs of wear and damage.

Inspecting from the Outside (flat roofs)

1. Flat roofs are not visible from the ground. If you have a flat roof, you must inspect it from the roof itself.
   a. If your roof is higher than a single story, look for a way to access the roof from a door, window, access panel or other interior access
   b. If the roof is higher than one story and does not have interior access, then it is best to have the roof inspected by a professional roofing contractor
2. Look for puddles of water. Although some people used to believe standing water on a flat roof would help keep the home cool during the summer, the disadvantages far outweigh any cooling benefits.
   a. Insects, plants and fungi can breed and grow in the water
   b. Roots from growing plants can puncture your roofing material

c. During the winter, freezing water can cause serious roof damage

d. If you see standing water or signs of past water puddles, discuss this matter with a professional roofing contractor

3. Your flat roof should drain along the roof edges and into downspouts or through drains located in the roof itself.
4. If your roof has one or more interior drains, inspect the drains to make sure they flow freely and are not clogged with debris.

Roof Flashing

Flashing is the sheet metal or other durable material that protects roof joints and other protrusions from water penetration.

You will find flashing in the following locations:

- Roof valleys
- Roof and plumbing vents
- Around chimneys
- Along eaves
- Anywhere else water can seep through open joints into the roof sheathing

The flashing's edges are sometimes sealed with caulk or roof cement. Flashing is key to keeping your roof watertight. You can avoid repair to and replacement of your entire roof when you stop a leak by re-caulking a dried out flashing seam.

Gutters and Downspouts

Gutters and downspouts collect water from the roof and carry it away from the house. This prevents:

- Topsoil erosion around concrete footings
- Basement flooding
- Siding and woodwork decay
- Paint damage
- Wall damage
- Serious foundation problems

Gutters and downspouts that leak or that are clogged with debris cannot perform their vital task. Gutters collect leaves, sticks, seed pods, mineral granules from roofing products and other debris. They should be cleaned:

- In the fall after most of the leaves have fallen
- In the spring after the trees have bloomed

If you have low gutters and know how to safely use extension ladders, you may feel comfortable performing this task yourself. If you have a multi-story home, don't like working from heights or don't like handling extension ladders, you may want to hire a contractor to clean your gutters.

HOME EXTERIOR

Your home is protected from the sun, wind, and rain by an exterior skin of wooden, masonry or manufactured siding. This siding should last the life of your home if properly maintained. However, even the most durable sidings can fail if the homeowner does not follow through with a regular maintenance program.

Exterior Cleaning

Cleaning your home's exterior surfaces once or twice a year will improve it's appearance and will help preserve your paint, stain or siding finish.

Wash from the bottom up with a solution of soap and warm water. Washing from the bottom up prevents streaking. Pay particular attention to the areas around door handles and window catches where dirt and grease will be heaviest. Rinse with fresh water from top to bottom to prevent runs of dirty liquid on a newly cleaned surface. You can use a pressure washer or a garden hose and scrub brush for this job.

If you find mildew on your siding, apply a household bleach solution directly to any affected areas and rinse with a garden hose.

SIDING INSPECTION

Paint

1. Protect your siding by inspecting for paint problems twice a year and repainting every two to five years, or as necessary.
2. Peeling or blistering paint is usually caused by warm, moist vapor from the house flowing through the walls, reaching the cold sheathing and condensing.
   a. Just a few drops of water between the siding and the film of paint will cause paint to blister and peel
   b. It may be necessary to install vents in the siding to remedy the moisture problem
   c. The defective areas should be properly prepared and repainted
3. If you observe other paint problems, such as worn, flaking, wrinkling or "alligatoring" paint, properly prepare and repaint the affected area.

Ground Clearance

1. Untreated wood must not be in contact with the ground. Moisture from the soil can cause decay as well as allow insects to gain entry to your siding.
2. Examine along the base of your home to make sure you have at least 6-8 inches of clearance between the ground and any wood siding or wood trim.
3. If necessary, re-grade your soil away from any wood.

Stain

1. Stain protects wood siding from moisture and insects.
2. Re-stain your siding every five to seven years, or as necessary, to restore color and preserve your siding.

Dry Rot and Termite Damage

Dry rot is a fungus that causes wood to crumble and termites destroy wood by chewing its interior.

1. Probe the edges of the wood siding with a knife or thin screw driver and look for soft, spongy spots. Pay particular attention to any part of the siding that was close to or in contact with the ground.
2. Check for visible evidence of termites. Look for their translucent one-half-inch-long wings or the mud tubes they sometimes build. If you find evidence of dry rot or termites, consult a licensed termite or pest control professional.

Holes and Split, Warped or Loose Siding

Simple surface problems such as holes in the wood, split or cracked boards, warped or buckled boards and loose siding should be repaired as soon as they appear.

Water will work its way through these defects into the interior wall where rotting can take place undetected. Find the source by checking for deteriorating roofing, leaking gutters or downspouts and poor drainage.

EXTERIOR CAULKING

Caulking is used to seal joints, gaps and seams in exterior walls. Without caulking, cool air, water and insects could enter your home through these openings. Typically, your home should be re-caulked every five years or less.

Where to Inspect

Roof:

- Where one flashing meets another flashing
- Where the flashing and a roof or dormer surface meet
- Where a chimney, flue, plumbing or electrical pipe, attic fan or skylight protrudes through the roof surface

Exterior Walls:

- Where siding and trim meet at corners
- Where siding meets the foundation, patio, deck or any other part of your home
- Around window and door frames
- Between poorly fitted pieces of siding
- Where pipes, framing members and other materials protrude through siding

FOUNDATIONS

Your foundation supports your home and keeps it from shifting. You should inspect your foundation twice a year to ensure it lasts for the life of your home.

The type of foundation you have depends on your home's design and your particular soil conditions. In areas where flooding or weak soil is a problem, houses are often built on piers or pilings. In some areas, pressure-treated wood foundations have become popular. The most common foundation, however, is a concrete or masonry perimeter enclosing a crawl space, full cellar or basement.

Foundation Inspection

Cracks:

1. Begin your inspection by looking for cracks along the foundation's outside wall.
   a. Normal curing of concrete and mortar joints can cause cracks. Most cracks are normal and are structurally insignificant
   b. Cracks wider than 1/16 inch should be investigated, possibly with the assistance of an engineer or qualified inspector, to determine whether the cracks are a cause for concern
2. Check the slope of the ground around your foundation
   a. The ground should slope away from your home so rain water will flow away from, not toward the foundation.
   b. Back filled soil along the house can settle over time. This can create a depression that will collect water near the foundation. Correct any depressions by raising the grade with topsoil (not sand or gravel) so that the ground slopes 2 inches per horizontal foot for 8 to 10 feet from the foundation
3. Settling along the foundation can also cause concrete patios and walkways to break and direct water towards your home. A contractor can add a new layer of concrete to reverse the slope.

Moisture

You should watch for:

- Condensation
- Basement leaks
- Crawl space moisture

These problems can cause wood structural members to decay.

Condensation

1. Condensation is caused when warm, moist air comes in contact with a colder surface such as a window, exposed pipe or bare concrete basement wall. It can look as if the window, pipe or wall is leaking. Condensation can be worse in new homes as water from concrete walls evaporate as part of the normal curing process.

2. Proper ventilation can control condensation.

Crawl Space Moisture

Soil under a crawl space can cause beams, floor joist, sub-floors and even roof sheathing to decay. Inspect all crawl spaces with a flashlight.

1. If it is necessary to go into the crawl space to view the entire area, wear a face mask. You can stir up insecticides and other chemicals that settled on the ground.
2. Look for a moisture barrier.
   a. All bare soil should be covered with a moisture barrier of 6-mil polyethylene plastic
   b. The plastic should go up the foundation walls to a point higher than the outside grade line and be weighted down with bricks, gravel or other non-organic material
3. Look for standing water. There should never be standing water under your home. If there is, consult a professional contractor for drainage options
4. Inspect the foundation vents.
   a. Foundation vents help control moisture in the crawl space
   b. Make sure the vents are open and not blocked by soil, leaves or other debris
   c. If the crawl space smells musty, you need more ventilation

GARAGE DOORS

You can prevent many garage door problems with regular maintenance:

1. Periodically clean the tracks, hinges and rollers.
2. Lubricate the tracks, hinges and rollers with penetrating oil or silicone spray.
3. Lubricate the locks with graphite powder.
4. Tighten the garage door screws every 12 months. They fasten the hardware to the door and will loosen over time as the door settles or as wood doors shrink.
5. Inspect the springs regularly. Replace any springs that develop bulges or are unevenly spaced.
6. Inspect the tracks for proper alignment, crimps in the track and other damage. If the door binds or drags, it is likely the tracks are poorly aligned or need lubrication.
7. Keep wood doors sealed and painted, particularly along the bottom edge, to prevent swelling and moisture damage.

Garage Door Opener

An improperly adjusted garage door opener can cause a serious accident. Your openers should have an automatic return switch so that the doors will reverse automatically if they meet an obstacle.

1. Test your garage door openers by blocking the door with your hands while the door is closing. If the door does not reverse when it encounters your hands, adjust the automatic reverse adjustment screws.
2. Height adjustment nuts control how far the doors open and close. If your doors do not open or close properly, you can reset the adjustment nuts.
3. If the drive unit works but the door won't open, the belt connecting the pulley with the motor may need adjusting.

DRIVEWAYS, WALKWAYS & STEPS

Concrete driveways, walkways and steps usually have expansion joints to minimize cracking. However, cracking is a natural characteristic of concrete that cannot be eliminated and should not create serious problems.

Snow and ice can damage concrete driveways, walkways and steps. Remove snow and ice promptly to protect your concrete. If you cannot remove a thin layer of ice, sprinkle sand or cat litter on the ice for traction. Do not use salt or chemicals to melt the ice. Salt and chemicals can damage your concrete and kill nearby grass, trees and shrubs.

WOOD DECKS

Cedar or redwood boards, treated wood and stained or painted wood are common materials for wood decks.

Cedar and redwood are more expensive than other decking materials but do not need to be painted or pressure treated. As the cedar weathers, it will turn a distinctive driftwood gray color. Redwood darkens to a natural color as it weathers.

Your wood decking will expand and contract with changes in the weather. This will cause nails to pull away from the boards and could cause some boards to warp.

1. Reset any pulled nails and re-nail any warped boards with a finishing hammer.
2. Do not use a regular hammer. The head of a regular carpenter's hammer will dent the wood around the nail.

There should be gaps between the deck boards so that water can drain from the deck. These gaps, however, can collect dirt, leaves and other debris. The obstructions can then soak up water and cause the wood to decay. Places where deck boards rest on joists underneath the deck are particularly prone to collecting obstructions. Your deck will last longer if you clean between the deck boards with a pressure washer once a year.

System / Appliance Malfunction Troubleshooting

Plumbing Fixtures / Faucets and Pipes

Problem	Possible Cause	Solution
The aerator on the faucet is broken or has a deteriorating finish.	Age and mineral deposits have caused damage.	Replace the aerator.
The showerhead and faucet are not allowing the water to flow smoothly and quickly.	Mineral deposits on the fixtures.	Put one cup of vinegar in a plastic bag and place it over the showerhead or fixture. Secure it in place with a twist tie and let stand overnight. In the morning, remove the bag and the mineral deposits should come off by wiping with a damp cloth.
A new kitchen faucet drips after shut off.	There is air left in the lines from installation.	If there is NOT a handspray, turn the handle off and on approximately 15-20 times. If there IS a handspray, hold it in the sink and turn the handle off and on very quickly 15-20 times. This will remove the air left in your supply lines.
The sink drain takes longer than usual to drain.	There may be a build-up of soap scum, hair and grease in the pipes.	Try using drain maintenance products that can be purchased at your local hardware store. These products are designed to remove the usual buildup of soap scum, grease and hair.

Toilets

Helpful Hint!

- Flush only toilet paper down a toilet and avoid all other paper products.

Problem	Possible Cause	Solution
Water is "running" in the toilet.	The toilet may be leaking internally.	Replace the flapper.
The toilet leaks water onto the floor.	There is a leak in the supply line.	Check the supply line for leaks. Also, ensure the supply tube nut (coupling nut) is tightened.
	There is a leak between the tank and bowl.	Replace the gasket between the tank and bowl.

Septic Tank

Helpful Hints!

- Septic tanks should be inspected and pumped every three to five years to help prevent costly replacement of the leach field.
- Don't deposit coffee grounds, cooking fats, disposable diapers, facial tissues, cigarette butts and other non-decomposable materials into the house sewer. These materials will plug the system.
- Use toilet tissue that breaks up easily when wet. Put a hand full of toilet tissue in a jar half full of water. Shake the jar and if the tissue breaks up easily, the product is suitable for the septic tank.
- Using too much soap or detergent when doing laundry can cause problems with the septic system. If there are lots of suds in your laundry tub when the washer discharges, cut back on the amount of detergent for the next similar load.

Problem	Possible Cause	Solution
The waste lines are backing up throughout the house.	The septic tank is full.	After lifting the lid to confirm the tank is full, have the tank pumped.
The bathroom sink is clogged.	There is a stoppage in the bathroom branch line.	Using either a plunger or snake, clear the stoppage.

Water Heater

Helpful Hint!

- Flush out the water heater twice a year to keep sediment from accumulating at the bottom of the tank. Be sure to turn off the power to the unit first.

Problem	Possible Cause	Solution
There is no hot water.	The pilot light (gas unit) is not lit.	Relight the pilot. (Call the gas company if assistance is needed.)
	The pilot light (gas unit) will not stay lit.	Turn the gas valves on and be sure the thermocouple is near the pilot flame and connected to the gas control. (Call the gas company if assistance is needed.)
	The gas is not coming out (gas unit).	Check the gas shutoff valve for the water heater and the house to make sure they are open. (Call the gas company if assistance is needed.)
	There is a malfunction in the thermocouple.	Replace the thermocouple.

Water Heater (con't)

Problem	Possible Cause	Solution
There is no hot water.	The water heater has no power. (Electric Unit)	Ensure the unit is plugged in. Check for a blown fuse and reset.
	The safety thermostat has stopped working.	Push the rest button (electric units only) and be sure the thermostat and heating elements are working.
	There is a malfunction in the heating thermostats.	Test the thermostats and replace if necessary.
	There is a malfunction in the heating elements.	Test the elements and replace if necessary.
	Rust, calcium or other sediment has accumulated in the tank or pipes.	Flush the tank and pipes to remove the sediment build-up.
There is not enough hot water.	The thermostat is set incorrectly.	Adjust the thermostat to a higher setting.
	Heat is getting lost in the pipes.	Insulate the hot water pipes.
	The hot water faucets leak.	Repair or replace the leaky faucets.
	There is a malfunction in the heating elements.	Test the elements and replace if necessary.
	Rust, calcium or other sediment has accumulated in the tank.	Turn off the power. Flush the tank to remove the sediment.
	The orifices on the burner are clogged.	Turn off the heater, wait for it to cool and clean out the clogged orifices.
The water is too hot.	The thermostat is set incorrectly.	Turn down the thermostat.
	There is not enough insulation around the thermostats.	Tighten the insulation around the thermostats.
	There is a malfunction in the heating thermostats.	Test the thermostats and replace if necessary.
	There is a malfunction in the heating elements.	Test the elements and replace if necessary.
	The exhaust vent is clogged (gas unit).	Clean the vent to remove the clog.
The water heater is leaking.	There is a leak in the drain cock, element seal or element gasket.	Tighten or replace the seal or gasket.
	The safety valve is leaking.	If the water is too hot, steam will be released through the safety valve. Turn down the thermostat. If the safety valve is defective, replace it.
	Rust, calcium or other sediment has accumulated in the tank.	Flush the tank to remove the sediment.
The water heater makes unusual noises.	Scale has formed on the heating elements (electric units only).	Remove the heating elements. Soak them in vinegar and gently remove the scale.
	Rust or sediment has accumulated in the tank.	Flush the tank to remove the sediment.
Sediment or rust colored water is coming though the faucets.	Scale has formed on the heating elements (electric units only).	Remove the heating elements. Soak them in vinegar and gently remove the scale.

Garbage Disposal

- **Always run cool water during use and for at least two minutes after you finish to help prevent stoppages.**
- **Avoid putting potato and carrot peels or stringy vegetables down the disposal.**
- **Once a week, grind several lemon or orange rinds in your disposal to help eliminate odors.**
- **Never put your hand in the disposal to clear a jam. Turn off power to the unit and use tongs or pliers to clear the debris.**
- **Always use cold water in your disposal to avoid liquefying the grease.**

Problem	Possible Cause	Solution
The motor will not work or turn on.	There is no power to the unit.	Ensure the unit is plugged in. Check for a blown fuse and reset.
	The on/off switch may be defective.	Check the stopper switch (batch feed model) or the wall switch (continuous feed model). Repair or replace as needed.
	The overload protector (reset) switch on the unit has tripped.	Ensure the unit is not jammed and push the reset button (usually located on the bottom of the unit) to restore power to the unit.
The breaker trips when the disposal is turned on.	Too many appliances are plugged into the circuit.	The disposal needs its own 15-amp circuit outlet.
The motor makes a humming noise.	The impeller/blades are jammed.	After turning off the power to the disposal, use tongs or pliers to clear all items that are jamming the blades. Insert an allen wrench that fits into the bottom of the unit and turn the allen wrench back and forth several times until the motor is free. Push the reset button when you are done to restore power to the unit.
The disposal is making an unusual amount of noise.	There is a metallic or other hard object in the unit.	Inspect the unit and remove the object with tongs or pliers.
	The mounting screws are loose.	Tighten the mounting screws at the top of the disposal, where it mounts to the bottom of the sink flange.
The disposal is leaking.	The sink/drain connection is loose.	Secure the flanges surrounding the gasket (between the disposal and the sink) or replace the rubber gasket if necessary.
The disposal takes too long to grind all the food.	There is not enough water.	When using the disposal, run more cold water.
	There is improper waste in the disposal.	After turning off the power to the disposal, use tongs or pliers to clear all items that are not acceptable for a disposal (for example, potato and carrot peels or stringy vegetables).

Garbage Disposal (con't)

Problem	Possible Cause	Solution
The disposal runs slowly or drains slowly.	There is not enough water.	When using the disposal, run more cold water.
	The drain line is clogged.	Run hot water to clear any clogged grease. Remove the drainpipe if it needs to be unclogged (NOTE: Do not use harsh chemicals to clear the drain.)
	The disposal is not grinding finely enough.	Replace any dull or damaged parts.
The disposal has a foul odor.	Food has been sitting in the disposal too long before being disposed.	To eliminate the odor, pour baking soda down the drain or grind up a citrus rind.

Dishwasher

Helpful Hints!

- Avoid liquid soap, which can over-sud and cause water to drip from the door.
- Regularly clean debris from the spray arms.
- If your dishwasher is stained, fill the detergent cup with powdered orange or lemon drink and let the washer run through its normal cycle.
- Add a rinse agent to cut down on film.
- When loading dishes, be sure the dishes do not block and/or damage the spray arm and face the dishes toward the spray for the best cleaning results.

Problem	Possible Cause	Solution
The dishwasher will not turn on.	The door is not locked/latched.	Be sure the door is securely shut and latched.
	The unit is plugged into the wrong receptacle.	If the unit is plugged into a receptacle shared with the disposal, make sure the plugs are not reversed.
	The timer or selector button is in the wrong position.	Adjust timer and/or selector buttons to the correct positions.
	Power is not reaching the unit.	Ensure the unit is plugged in and reset the breaker, if necessary.
	The door switch is malfunctioning.	Inspect the door switch for damage. Repair or replace as needed.
	The timer is defective.	Replace the timer.
The dishwasher does not fill with water.	The water valve is not turned on.	Make sure the water valve is in the "ON" position (it may be located under the sink, under the floor in the basement or in a closet behind the wall).
	The water filter is clogged.	If the unit has one, clean the water intake valve filter.
	The overflow switch is malfunctioning.	Check the switch. The unit will not fill if the switch sticks in the "FILL" position.
	The timer is defective.	Replace the timer.
Water continually runs.	The water intake valve is stuck.	Inspect the valve and make sure it is shut.
	The overflow switch is malfunctioning.	Check the switch. The unit will not fill if the switch sticks in the "EMPTY" position.
	The timer is defective.	Replace the timer.
The dishes are still dirty at the end of the wash.	The water is not hot enough.	Run the water in the kitchen sink until it gets hot. Then turn on the dishwasher. This will ensure that it fills up with hot water. Verify that the water is between 140°F and 150°F.
	Heavy debris and food were not removed from the dishes prior to loading.	Pre-rinse dishes before loading into the dishwasher.
	The dishes are not loaded properly.	Dishes should be faced towards the water spray and should not be touching each other.
	The detergent is old.	Replace with new detergent.
	The spray arms are blocked.	Be sure nothing is blocking the spray arms.
The soap dispenser will not open.	There is soap build-up in the soap cup.	Remove hardened detergent from the soap cup and clean with vinegar.
	The soap dispenser lid is blocked.	Remove any obstructions blocking the lid.
The dishes are wet.	There are mineral deposits on the heating element.	Wash the element gently with vinegar.
	The heating element wire is loose.	Secure all electrical connections around the heating element.
	The heating element has burned out.	Replace the heating element.
	The timer is defective	Replace the timer.
The dishwasher is leaking water.	The door seal is damaged.	Replace the door seal.
	The overflow switch is defective.	Check for damage to the switch and replace if necessary.
	The heating element nuts are loose.	Check for loose nuts that attach the tub to the element and tighten them.
	The hose clamps are loose.	Check for loose hoses and tighten clamps (you may need to move the dishwasher).
	The door hinges are broken.	Replace the door hinges.
	You are using liquid soap.	Stop using liquid soap and switch to powder soap.
The dishwasher is making unusual noises.	The spray arm is hitting the dishes.	Adjust the dishes to ensure they do not obstruct the spray arms.
	The water intake valve is damaged causing a knocking sound when the unit fills.	Replace the water intake valve.
	There is not enough water in the unit.	Avoid using other faucets while the dishwasher is running.

Dishwasher (con't)

Problem	Possible Cause	Solution
The dishwasher is not draining and leaves standing water in the tub. (Note: One to two cups of remaining water are normal.)	There is a kink or clog in the drain hose.	Clear the drain hose by disconnecting and blowing through it.
	There is a clog in the air gap (small cap located on the countertop or sink deck).	Take the air gap cover off and remove any debris from the air gap.
	The pump is blocked.	Check the pump area in the rear of the tub for paper or large objects.
	The kitchen sink drain is clogged.	Since the dishwasher drains into the kitchen sink and often the disposal, run the disposal to clear any food and unclog the drain if necessary.
Water is leaking out of the air gap.	There is a clog in the hose that runs from the air gap to the disposal.	Detach the line and remove any clogs. Replace the hose.

Electric Cooktop/Range/Oven

Helpful Hints!

- To avoid damaging the burners, do not use extra-large and heavy cooking pans.
- Regularly remove any grease or food build-up around the burners and connections.
- If you have a self-clean oven, DO NOT use any other method to clean.

Problem	Possible Cause	Solution
The range will not turn on.	Power is not reaching the unit.	Ensure the unit is plugged in. Check for a blown fuse and reset.
One of the burners does not turn on.	If the unit has an electronic control, it may need to be "reset".	If there is power to the unit and it has an electronic control, disconnect the power for 15-30 minutes and re-try.
	The element is not properly plugged in.	Unplug the burner and reinstall to a fully seated position to ensure it is securely plugged in.
	The burner is defective.	Remove the burner and plug it into another burner receptacle of the same size. Turn on that element. If it still does not work, replace the element.
	Oven is in the self-clean cycle.	This cycle requires a high amount of power. The stove may not be able to work at the same time as the self-clean cycle.
	The wiring, terminal block or switch is defective.	Check each part and replace if necessary.
A burner does not cook well.	The cooking pan is the wrong size.	Use flat-bottomed pans that just cover the element.
	The element is damaged.	Replace the element.
The timer is not working.	The timer has not been set correctly.	See the owner's manual for specific instructions.
	The timer fuse has blown.	Check the fuse in the timer circuit.
	There are loose connections.	Turn the power off and tighten all loose electrical connections.
	The timer has a malfunction.	Replace the timer.
The oven overheats.	A vent is clogged.	Clear the vent to eliminate the clog. If necessary, replace the air filter.
The oven does not hold the temperature that was set.	The door gasket is damaged.	Replace the door gasket.
	The thermostat is not calibrated correctly.	Call the manufacturer who will help you re-calibrate the unit over the phone.
There is a lot of condensation/moisture in the oven.	The vent is clogged.	Clear the vent to eliminate the clog. If necessary, replace the air filter.
	The door does not close properly.	Inspect the door hinges and gasket. Repair or replace as needed.
The light in the oven does not work.	The bulb is burnt out.	Turn off the oven and replace the bulb with the correct type and size.
	There is a defective switch or poor wiring to the bulb socket.	Test the switch and wiring. Replace parts as needed.
The oven door does not close properly.	A hinge or spring is malfunctioning.	Replace the defective part.
Features on the control panel are not working.	A fuse has blown.	Check the fuse in the accessory circuit.
The oven's self-clean function is not working.	The door is not locked.	Securely shut and re-latch the door and then restart the self-clean cycle.

Gas Cooktop/Range/Oven

Helpful Hint!

- To avoid damaging the burners, do not use extra-large and heavy cooking pans.
- Regularly remove any grease or food build-up around the burners and connections.
- If you have a self-clean oven, DO NOT use any other method to clean it.

Problem	Possible Cause	Solution
The oven or burners will not ignite.	The pilot light is out.	Relight the pilot. (Call the gas company if assistance is needed.)
	Gas is not on.	Ensure the gas valve is open. If necessary, contact the local gas company.

Gas Cooktop/Range/Oven (con't)

Problem	Possible Cause	Solution
The oven or burners will not ignite.	The burner cap is not properly set (sealed burner unit).	Make sure the cap is seated properly, is not tilted and does not rock or wobble. Ensure the cap matches the burner size. Your unit may have one or more burners that are different sizes and you want to make sure a small cap is not on a large burner.
The burner will not stay on.	The pilot port is clogged. The unit is located in a drafty area.	Clear the port with a toothpick, small wire or pipe cleaner. Try to avoid drafts near the range.
The flame is not steady.	The burner is clogged. There is an incorrect mixture of gas and air.	Clean the burner surface and ports. Contact the local gas company.
The burners leave soot or make an unusual noise.	There is an incorrect mixture of gas and air.	Contact the local gas company.
The oven overheats or bakes unevenly.	The oven was not pre-heated. Circulation in the oven is affected by placement of aluminum foil in the oven. The exhaust vent is clogged. The calibration needs to be adjusted. The door gasket is damaged.	Allow your oven to preheat before baking. Since many items have a short cooking time, failure to preheat dramatically affects cooking results. If you use aluminum foil on your oven shelf, never cover the entire shelf. This will block the circulation of the heat in the oven. Allow two inches around the back and sides of the oven shelf for proper heat circulation. Clean the vent to eliminate the clog. If necessary, replace the air filter. Call the manufacturer who will help you re-calibrate the unit over the phone. Replace the door gasket.
The oven door will not open.	The self-clean dials are in the "ON" position.	Reset the self-clean dials to the "OFF" position.
There is a gas odor at the unit.	The pilot is not lit. The gas line is leaking.	Ventilate the room and relight the pilot. Extinguish all flames. Do not turn on any electrical switches. Immediately notify the local gas company.

Microwave Oven

Helpful Hints!

- Do not use pans or dishes that are metal or have metallic trim.
- Use only mild soap and/or baking soda to clean the interior of the microwave.

Problem	Possible Cause	Solution
There are small spots/holes in the interior lining.	Food particles are stuck to the walls and need to be removed regularly, before damage begins.	Boil a cup of water mixed with two tablespoons of lemon juice or baking soda for 3-5 minutes. The steam will loosen the food that can then be wiped away.
The touch pad does not operate correctly.	Power is not reaching the unit. The clock is not set. Improper programming or a program sequence was entered.	Ensure the unit is plugged in. Check for a blown fuse and reset. Set the clock. Press "CLEAR" and start over. Sometimes, improper programming or a program sequence, such as delay start, can cause the touch pads to be non-responsive.
The turntable is not turning.	The turntable is not set in properly. The turntable was placed upside-down. A "timer" function was selected.	Set the turntable securely on the turntable motor and ensure it is centered, or it will not turn. Turn the turntable right side up. If the turntable is upside-down it will drag on the floor of the microwave. Ensure a "cook" function is selected.
There is a popping noise or arcing in the unit.	The unit was turned on when it was empty. Metal or metallic trimmed items were placed in the microwave. The metal cooking rack that comes with the unit is not set in place correctly.	Always have something in the microwave when in use. Never use metal or metal trimmed utensils and serving pieces in the microwave cavity. Be sure the rack is firmly in place and not upside-down.

Trash Compactor

Helpful Hints!

- Replace the deodorant regularly to prevent odors.
- Before use, check that the bag is in the proper position and that the retainer ring and clips are securely in place.

Problem	Possible Cause	Solution
The compactor will not turn on.	Power is not reaching the unit. The safety lock is not on. The drawer is open.	Ensure the unit is plugged in. Check for a blown fuse or tripped breaker and reset. Turn on the safety lock. Be sure the door is shut securely and remove anything that keeps it from closing.
The load does not compact completely.	The ram has seized up. The chain drive, gears or pulley are loose or broken.	Oil the ram screws or replace the screws if they are stripped. Check the chain and tighten or replace if necessary.

Trash Compactor (con't)

Problem	Possible Cause	Solution
A breaker trips or a fuse blows during the compactor's cycle.	There are too many appliances on one circuit. There is a short in the cord, plug, or switch.	The unit may need its own circuit. Be sure the cord, plug and switch work.
The compactor makes loud noises.	The drive chain is loose. The unit needs to be greased. There are loose parts.	Tighten the drive chain. Oil the unit. Tighten all screw and bolts.
The compactor door is stuck shut.	The ram stalled.	Be sure the unit is closed and plugged into the outlet. If necessary, inspect for a broken chain, belt, pulley or drive screw.
The compactor will not stop running.	The top-limit switch is malfunctioning. There is a defect in the start/stop switch.	Unplug the unit and be sure the switch works. Inspect and replace the switch, as necessary.
Trash spills out of the compactor.	The bag is not installed properly.	Be sure the bag and clips are secure.
The compactor has an unusual odor.	The deodorant is empty. The aerosol nozzle on the deodorant is clogged.	Replace the deodorant. Clear the clog using a thin wire or by running the nozzle under warm water.

Refrigerator & Freezer

Helpful Hints!

- **Clean the interior shelves, shell and gaskets quarterly.**
- **Clean the coils on the back or underneath annually.**
- **Remove odors from your fridge by placing a cotton ball soaked in vanilla extract, a cup of baking soda or a slice of lemon in the fridge at all times.**

Problem	Possible Cause	Solution
No power and/or motor is not turning on, interior light(s) not working.	There is no power at the outlet or the unit has come unplugged.	Check to see if the unit is still plugged in. If it is plugged in, use a hair dryer or radio to test the outlet to be sure the outlet is working. Check for a blown fuse and reset. If it continues to blow the fuse, the unit may need its own designated circuit.
The unit has power, the motor is clicking occasionally and the light is on, yet it is not cooling.	The condenser coils are dirty.	Clean the coils by gently vacuuming.
The unit cools poorly, cycles off and on, or is constantly on.	The condenser fan is malfunctioning (frost-free type). The thermostat is on the wrong setting. The condenser coils are dirty. The door gasket is damaged, allowing air to escape. There is heavy frost accumulation. The weather is hot and humid. Heat is coming from the light because it is not turning off when the door is closed.	Inspect the fan. Repair or replace as needed. Adjust the temperature setting. If the thermostat is adjusted to 34°F or under, try keeping the refrigerator at 40°F instead. Clean the coils by gently vacuuming. Inspect the gasket and replace, as necessary. Defrost the unit regularly. If the unit runs continuously but cools correctly, there is no malfunction with your unit. Try to cool the room. Push each switch button (one at the light and one near the door). Make sure they are not stuck.
The unit makes unusual noises.	The unit is not sitting level. The drain pan rattles. The fan blades are blocked by something.	Level the unit. Center the pan so it does not touch the sides and is clear of the compressor. Be sure the evaporator and compressor fans are not obstructed.
The unit ices up quickly or will not defrost.	The door gasket is damaged. Foods are left uncovered. The drains are clogged. The defrost, timer, heater or thermostat is damaged. The drain hose or drain pan is cracked.	Replace the door gasket, as necessary. Cover and seal all food and liquids. Clean all drains. Check the timer, heater and thermostat for defects. Replace any broken parts.
The refrigerator leaks water underneath or inside.	The drains are clogged or the drain pan is full. The drains are clogged.	Clear all drains and be sure the drain pan is empty. Flush and clear all drains.
The refrigerator has an unusual odor.	The drain pan is dirty. Food has fallen under "crisper" or "meat" drawers.	Clean and disinfect the drain pan. Remove the drawers and clean.

Clothes Washer

Helpful Hints!

- Adjust the level of your washing machine by turning the legs clockwise to lower them or counter-clockwise to raise them.
- To clean your washing machine, fill it with warm water and pour a gallon of distilled vinegar into it. Run the machine through an entire cycle. The vinegar will clean the hoses and unclog the soap scum.
- To remove odors inside of the washer, fill it with hot water, then set for regular speed and longest time. Add a cup of baking soda. Allow washer to complete entire wash and rinse cycle. If odor lingers, repeat entire process.

Problem	Possible Cause	Solution
The unit will not turn on.	The outlet does not have power.	Ensure unit is plugged in. Reset the fuse box or circuit breaker.
	The safety switch has tripped.	Distribute the clothes evenly in the machine and be sure the lid is completely closed.
	The house inlet valve may not be open.	Open the valve.
The machine does not fill with water.	There is no water supply.	Make sure the water valve is turned on.
	The filters are clogged.	Clean the inlet hose filters.
	There is a kink in one of the water hoses.	Straighten all water hoses.
	The timer is not set.	Slightly turn the timer, ensuring all buttons are set correctly.
	The control button for the water is not pushed in all the way.	Push in the button to make sure it is fully depressed.
The unit is not draining.	The drain hose is kinked.	Straighten the drain hose.
	The position of the drain hose is too high.	Do not position drain hoses higher than 4 feet above the floor.
	The lid is not closed completely.	The washer drains and spins at the same time, so the lid must be down.
The unit fills with water but does not run.	The lid safety switch is tripped.	Make sure the lid is firmly attached and closed. Test the switch.
	There is too much laundry in the tub.	Take some items out and give the machine 15 minutes to reset the cycle.
	The timer is defective.	Replace the timer.
The motor runs, but the unit does not agitate or spin.	The drive belt is loose or broken.	Tighten or replace the drive belt as necessary.
The water is not hot enough.	The water heater setting is too low.	Set the thermostat on the water heater to between 140°F and 160°F.
	The water supply hoses are misconnected.	Reconnect the hot water hose to the hot water side and the cold water hose to the cold water side.
	There is a defect in the mixing valve or timer.	Replace the valve or timer.
The water runs continuously.	The overflow switch hose is disconnected.	Replace the water hose.
	The overflow switch, timer or mixing valve is defective.	Replace the overflow switch, timer or mixing value as necessary.
The unit is leaking water.	The hose connection is loose.	Tighten the connection.
	The gasket, mixing valve, hoses, overflow switch or sensor is defective.	Replace the defective part or parts as necessary.
The unit shakes or vibrates across the floor.	The machine or load is not level.	Level the machine and distribute clothes evenly in the tub.
	There is a loose/defective hose connection.	Tighten or replace the connection.

Clothes Dryer

Helpful Hint!

- Clean the lint screen after each load of clothes.

Problem	Possible Cause	Solution
The unit will not turn on.	The door is open.	Shut the door securely.
	No power is reaching the unit.	Ensure the unit is plugged in.
		Reset the fuse box or circuit breaker.
	The motor wiring is loose.	Tighten all loose electrical connections.
	There is a defect in the door switch, centrifugal switch or timer.	Inspect all parts and replace as necessary.
The drum is stuck, though the motor still runs.	The drum is blocked.	Free the drum from any obstructions.
	The drive belt is broken.	Replace the drive belt.
	The support wheel or idler wheel assembly is broken.	Inspect all parts and replace as necessary.
The clothes don't dry, though the drum turns.	There is a clog in the lint trap or exhaust vent.	Clear the trap and vent.
	The safety thermostat, heating element or timer is defective.	Inspect all parts and replace as necessary.

Clothes Dryer (con't)

Problem	Possible Cause	Solution
The load takes a long time to dry.	There is a clog in the lint trap or exhaust vent.	Clear the trap and vent.
	The dryer is overloaded.	Remove some items and dry the load again.
	The clothes are too wet.	Ensure the spin cycle is completed in the washer and remove some clothes to dry the load again.
	The fan is loose.	Check the fan and tighten if necessary.
	The door gasket is damaged.	Replace the door gasket.
The unit does not stop drying at the end of the cycle.	The timer is defective.	Replace the timer.
The dryer is making a squeaking noise.	Loose cabinet screws may cause squeaks.	Check all exposed screws and make sure they are tight.
	Foreign objects are causing squeaks.	Check for foreign objects in the drum and below the lint filter.

Heating System

Helpful Hints!

- **Clean and/or replace filters once a month.**
- **One month before the start of heating season, have maintenance performed on your heating system.**
- **Open window shades and awnings to increase direct sunlight entering your home and lower heating costs.**

Problem	Possible Cause	Solution
There is no heat.	There is no power to the unit.	Ensure unit is plugged in. Check for a blown fuse and reset.
	The blower belt is broken.	Replace the belt.
The rooms are not warm enough.	The filter is dirty.	Replace the filter.
	The registers are dirty.	Clean and vacuum the registers and ensure they are open.
	There are air leaks in the ducts.	Seal the leaks with duct tape.
	The ducts are blocked.	Remove any objects that are blocking the duct.
	A register is closed.	Open all registers.
.	The duct damper is in an incorrect position.	Adjust the dampers to correct.
	The blower belt is loose.	Tighten the blower belt.
Soot gathers in the house.	The filter is dirty.	Replace the filter.
	The ducts are dirty.	Have the ducts professionally cleaned.
The blower makes unusual noises.	The pulley is loose.	Tighten the pulley screws.
	A belt is worn out or the tension is too tight.	Replace the worn belt or loosen the tension.
	The blower bearings need oil.	Oil the bearings.

Air Conditioning System

Helpful Hints!

- **Clean and/or replace the filters once a month.**
- **Keep the condensing unit free of debris by vacuuming dust and lint from the registers regularly.**
- **One month before air conditioning season, have maintenance service done on your system.**
- **Use window shades and awnings in the summer to reduce the amount of sunlight entering your home and lower cooling costs.**

Problem	Possible Cause	Solution
The unit will not turn on.	There is a blown fuse or tripped breaker.	Check the circuit breaker and replace the fuses in the disconnect box. (Always turn off the circuit breaker before replacing the fuses.)
The air is not cool enough.	The condenser coil is dirty.	Remove all debris from and around the unit so that air can properly circulate through the fans and replace/clean the filters.
	There is direct sun on the evaporator unit.	Create shade for the unit.
	The insulation has fallen off the feed line.	Reattach any loose insulation and replace any worn-out insulation.
	There may be a clog in the evaporator unit or something blocking the fan.	Clean out the evaporator unit.
The unit constantly cycles off and on.	The filter is dirty.	Replace or clean the filter.
Water is leaking into the walls or ceiling (attic installation.)	The drain hose from the condenser pan is clogged.	Unclog the hose so water can empty through it.

Electrical System

Helpful Hint!

- To prevent power outages, be sure to avoid overloading circuits with too many appliances or fixtures.

Problem	Possible Cause	Solution
The lights or outlets do not work.	There is no power to the outlet or fixture.	Be sure all switches at the fuse box are in the "ON" position and no fuses have blown. Unplug all appliances and reset the breaker. Reset the GFI outlet if it has been tripped.
	The outlet or switch is defective.	Replace the outlet or switch.
There is no power to the entire house or half of the house.	There is a tripped circuit breaker.	Reset the circuit breaker and replace any fuses, as necessary.

Pool/Spa Equipment

Helpful Hint!

- Maintain proper water level at all times.
- Keep the pool chemically balanced. Most pool supply stores will test a sample of your pool water for free.
- Consult your pool and spa company for specific suggestions on maintaining your particular system.

Problem	Possible Cause	Solution
The pump has no power.	The motor is not receiving power.	Reset the fuse box or circuit breaker. Be sure the timer is set correctly. Oil the motor as necessary.
	The water level is too low and the prime has been lost.	Add water to the pool/spa.
The pump will not prime.	The valves are not in the correct position.	Correct the valve position.
	There are leaks in the suction line.	Locate and repair the leaks.
The heater is not working.	The pilot is not lit.	Light the pilot.
	The gas valve is on the pilot setting (gas heater).	Turn the pilot setting to the "ON" position.
	The unit is not receiving gas.	Be sure the gas cock is in the correct position.
	There is no power to the unit.	Reset the circuit breaker or relight the pilot.
	Pressure switch tripped due to a dirty filter.	Backwash the filter.
The water pressure is too low or too high.	The filter is dirty or blocked.	Backwash the filter and clean the cartridge.
	The skimmer and pump basket are clogged.	Clean the skimmer and pump basket.
	The valves are in the wrong position.	Correct the valve position.
	There is a water leak.	Locate and repair the leaks.
The filter is not working.	The circuit breaker has tripped.	Reset the circuit breaker.
	The motor is not plugged in or the timer is not set properly.	Plug in the motor and reset the timer.
	The filter is clogged.	D.E. Filter - Backwash or replace.
		Sand Filter - Replace sand.
		Cartridge Filter - Remove and clean cartridge.

Important Information

Old Republic Home Protection Service: **(800) 972-5985**

Old Republic Home Protection Plan #: _____

Phone Company: _____

Gas Company: _____

Electric Company: _____

Water Company: _____

Cable Company: _____

Fire Station: _____

Police Station: _____

Homeowner's Insurance Agent: _____

Homeowner's Policy #: _____

Poison Control Center: _____

OLD REPUBLIC HOME PROTECTION

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